CLAIMS

What is claimed is:

- 1 1. A method of provisioning a circuit comprising the steps of:
- 2 provisioning an Ethernet port facility, including determining members of
- 3 a Link Capacity Adjustment Scheme Virtual Concatenation Group before virtual
- 4 tributary or synchronous transport signal cross connections are provisioned and
- 5 before Synchronous Optical Network or Synchronous Digital Hierarchy cross-
- 6 connections are provisioned;
- 7 provisioning virtual tributary or synchronous transport signal cross
- 8 connections; and
- 9 provisioning Synchronous Optical Network or Synchronous Digital
- 10 Hierarchy cross-connections.
- 1 2. The method of claim 1, wherein the step of provisioning the Ethernet
- 2 port facility comprises the step of
- 3 provisioning the Ethernet port facility so that Virtual Concatenation
- 4 Group members that are not associated with a virtual tributary or synchronous
- 5 transport signal cross connection return an Link Capacity Adjustment Scheme
- 6 sink status of FAIL and Virtual Concatenation Group members that are not

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- 7 associated with a virtual tributary or synchronous transport signal cross
- 8 connection enter an operational Link Capacity Adjustment Scheme source state
- 9 of "Do Not Use".
- 1 3. The method of claim 2, wherein the method further comprises the step
- 2 of:
- 3 using Link Capacity Adjustment Scheme source and sink adaptation
- 4 functions, automatically activating the Virtual Concatenation Group members.
- 1 4. The method of claim 3, wherein the step of using Link Capacity
- 2 Adjustment Scheme source and sink adaptation functions, automatically
- 3 activating the Virtual Concatenation Group members comprises the step of:
- 4 causing the Virtual Concatenation Group members to have an Link
- 5 Capacity Adjustment Scheme sink status of OK and an operational Link
- 6 Capacity Adjustment Scheme source state of NORM or EOS.
- 1 5. A system for provisioning a circuit comprising:
- 2 means for provisioning an Ethernet port facility, including determining
- 3 members of a Link Capacity Adjustment Scheme Virtual Concatenation Group

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- 4 before virtual tributary or synchronous transport signal cross connections are
- 5 provisioned and before Synchronous Optical Network or Synchronous Digital
- 6 Hierarchy cross-connections are provisioned;
- 7 means for provisioning virtual tributary or synchronous transport signal
- 8 cross connections; and
- 9 means for provisioning Synchronous Optical Network or Synchronous
- 10 Digital Hierarchy cross-connections.
- 1 6. The system of claim 5, wherein the step of provisioning the Ethernet port
- 2 facility comprises the step of
- means for provisioning the Ethernet port facility so that Virtual
- 4 Concatenation Group members that are not associated with a virtual tributary or
- 5 synchronous transport signal cross connection return an Link Capacity
- 6 Adjustment Scheme sink status of FAIL and Virtual Concatenation Group
- 7 members that are not associated with a virtual tributary or synchronous transport
- 8 signal cross connection enter an operational Link Capacity Adjustment Scheme
- 9 source state of "Do Not Use".

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- 1 7. The system of claim 6, wherein the method further comprises the step
- 2 of:

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- means for using Link Capacity Adjustment Scheme source and sink
- 4 adaptation functions, automatically activating the Virtual Concatenation Group
- 5 members.
- 1 8. The system of claim 7, wherein the step of using Link Capacity
- 2 Adjustment Scheme source and sink adaptation functions, automatically
- 3 activating the Virtual Concatenation Group members comprises the step of:
- 4 means for causing the Virtual Concatenation Group members to have an
- 5 Link Capacity Adjustment Scheme sink status of OK and an operational Link
- 6 Capacity Adjustment Scheme source state of NORM or EOS.